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Proposed Amendments To
310 CMR 50.00
Toxics Use Reduction

Regulatory Authority:
M.G.L. Chapter 21I, §§ 3, 10, 11, and 12

June 27, 2007

Note: Changes shown in redline/strikeout format, with additions underlined and deletions shown as strikeout text.

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310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 50.00: TOXICS USE REDUCTION

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50.01: Authority

The Department of Environmental Protection adopts 310 CMR 50.00 pursuant to M.G.L. c. 21I, §§ 3, 10, 11 and 12.

50.02: Purpose

- (1) The Department of Environmental Protection promulgates 310 CMR 50.00 to carry out its authority and responsibility:
- (a) to promote toxics use reduction as the preferred means for preventing risks associated with the production and use of toxic substances, including risks to workers, consumers, the public and the environment;
 - (b) to promote toxics use reduction as the preferred means for achieving compliance with any state or federal law or regulation pertaining to toxics production and use, hazardous waste, industrial hygiene, worker safety, public exposure to toxics, or releases of toxics into the environment;
 - [\(c\) to promote resource conservation and implementation of environmental management systems;](#)
 - ~~(d) (e)~~ to promote the coordination and enforcement of federal and state laws and regulations pertaining to chemical production and use, hazardous waste, industrial hygiene, worker safety, public exposure to toxics and the release of toxics into the environment; to coordinate state programs in order to promote most effectively toxics use reduction in the commonwealth;
 - ~~(e) (d)~~ to minimize unnecessary duplication of reporting requirements concerning chemical or hazardous substance production, use, release, disposal, and worker exposure;
 - ~~(f) (e)~~ to provide up-to-date and consistent information about manufacturing,

worker exposure, distribution, process, sale, storage, release or other use of chemicals on a facility, regional and statewide basis;

~~(g)~~ ~~(f)~~ to protect the public health, safety and welfare;

~~(h)~~ ~~(g)~~ to provide for the proper administration of and to otherwise effectuate the purposes of M.G.L. c. 21I.

50.10: Definitions

As used in 310 CMR 50.00, the following terms shall have the following meanings, unless the context otherwise clearly requires.

Agency means state agency.

Appellant means an individual or organization who requests an adjudicatory hearing pursuant to M.G.L. c. 21I and 310 CMR 50.00.

Applicant means an individual who submits an application for certification as a toxics use reduction planner in accordance with 310 CMR 50.50.

Article means a manufactured item, other than an item which is manufactured at the facility:

- (a) which is formed to a specific shape or design during manufacture;
- (b) which has end use functions dependent in whole or in part upon its shape or design during end use; and
- (c) which does not release a toxic substance under normal conditions of processing or use of that item at the facility or establishments.

Board means the Science Advisory Board of the Toxics Use Reduction Institute at the University of Massachusetts Lowell.

Byproduct means nonproduct outputs of toxic or hazardous substances generated by a production unit, before handling, transfer, treatment or release. "Otherwise used" substances shall be counted as byproduct when they leave a production unit.

CERCLA means the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 *et seq.* (PublicLaw92-500).

Commissioner means the Commissioner of the Department of Environmental Protection (pursuant to St. 1989, c. 240, § 101, "... the Department of Environmental Quality Engineering shall be known as the Department of Environmental Protection") or his designee.

Council means the Administrative Council on Toxics Use Reduction as established by M.G.L. c. 21I, § 4.

Covered toxic means:

- (a) a toxic substance that is manufactured, processed, or otherwise used at a facility in

amounts, determined in accordance with 310 CMR 50.20, equal to or greater than the applicable threshold amount.

(b) A "covered toxic" also means a toxic substance manufactured, processed, or otherwise used by a toxic user within a priority user segment designated pursuant to M.G.L. c. 21I, § 14 for which the Department requires reporting or planning pursuant to M.G.L. c. 21I, §§ 14 and 10 or 11.

Customs territory of the United States means the 50 States, the District of Columbia, and Puerto Rico.

Department means the Department of Environmental Protection (pursuant to St. 1989, c. 240, § 101, "... the Department of Environmental Quality Engineering shall be known as the Department of Environmental Protection").

Emission means a release of a toxic or hazardous substance to the environment or a transfer of a toxic or hazardous substance in waste to an off-site location.

Environmental Aspect means an element of a facility's products, activities, or services that can interact with the environment.

Environmental Impact means any change in the environment resulting from a facility's products, activities, or services.

Environmental management system means a quality-based management system that effectively integrates environmental considerations into an organization's day-to-day operations and management culture. In order to be eligible to be an alternative to toxic use reduction planning, the environmental management system shall, at a minimum, meet the following criteria: (a) include all production units that use TURA-listed chemicals used in reportable quantities as part of the environmental management system; (b) identify all TURA-listed chemicals used in reportable quantities as significant aspects; (c) consider toxics use reduction when identifying significant aspects and developing associated objectives and targets; (d) emphasize source reduction in achieving objectives; and (e) incorporate appropriate environmental performance metrics when developing objectives and targets.

Environmental Management System Professional or EMS Professional means a person accredited or certified under a national, international or other recognized EMS standard or a person who has at least two years of experience in developing or auditing EMSs.

EPCRA means the Emergency Planning and Community Right-to-know Act, 42 U.S.C. § 11001 *et seq.* (Public Law 99-499).

Establishment means an economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed.

Facility means all buildings, equipment, structures, and other stationary items which are located on single site or on contiguous or adjacent sites and which are owned or operated by the same person, or by any person who controls, is controlled by, or is under common control with, such person. A facility may consist of more than one establishment if the

establishments are operated by persons who have a common corporate or business interest (including, without limitation, common ownership or control) in the establishments. If the facility consists of more than one establishment where the establishments are operated by persons who do not have a common corporate or business interest (including, without limitation, common ownership or control) in the establishments, then each such person shall treat the establishments it operates as a facility.

For purposes of this definition, a "common corporate or business interest" includes ownership, partnership, joint ventures, ownership of a controlling interest in one person by the other, or ownership of a controlling interest in both persons by a third person.

Form A means the report authorized by 40 CFR, part 372.27 and containing the data elements specified in 40 CFR, part 372.95.

Form R means the report required by Section 313 of EPCRA and 40 CFR part 372.

Form S means the form required by M.G.L. c. 21I and 310 CMR 50.30.

Full-time Individual Employed or Full-time Equivalent mean each 2,000 hours worked per year by an employee or combination of employees.

Full-time Employee means each 2,000 hours worked per year by an employee or combination of employees.

Full-time Work Experience means experience during full-time employment which extends over an uninterrupted period of three months or more with a minimum of 37.5 hours per week.

General Practice Toxics Use Reduction Planner means an individual who has a valid certification issued by the Department pursuant to 310 CMR 50.54 to certify toxics use reduction plans for any toxics user.

Higher hazard substance means a substance designated by the Council as a higher hazard substance pursuant to M.G.L. c.21I, § 9 and 301 CMR 41.00.

Import means to cause a toxic substance (including a mixture containing a toxic substance) to be imported into the customs territory of the United States. For purposes of this definition, "to cause" means to intend that the toxic substance be imported and to control the identity of the imported toxic substance and the amount to be imported. For purposes of this definition, "to cause" includes, without limitation, (i) situations where a person orders a toxic substance from a foreign supplier, and (ii) situations where the person uses an import brokerage firm as an agent to obtain the toxic substance.

Independent Auditor means a person qualified by experience and/or training to audit an EMS. This person may be a third-party auditor or an employee of a facility provided that the employee is not the person who has responsibility for implementing the EMS.

Institute means the Toxics Use Reduction Institute at the University of Massachusetts Lowell.

Intermediate Product means

- (a) in chemical manufacturing, any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of another chemical substance or mixture, or that is intentionally present for the purpose of altering the rate of chemical reactions, other than a non-isolated intermediate as defined in M.G.L. c. 21I;
- (b) in any other setting, any manufactured substance, compound, or product that is consumed, in whole or in part, in a chemical or physical process for the intentional manufacture of another product, or that is intentionally present for the purpose of aiding the manufacture of another product, other than a non-isolated intermediate as defined in M.G.L. c. 21I and 310 CMR 50.00.

Large Quantity Toxic User means any toxics user who manufactures, processes or otherwise uses any toxic or hazardous substance in an amount, determined in accordance with 310 CMR 50.20, the same as or greater than the applicable threshold amount in a calendar year at a facility. When more than one threshold applies to a facility's manufacturing, processing, or other use of a toxic substance, the toxics user is a large quantity toxics user if the facility exceeds any applicable threshold.

Limited Practice Toxics Use Reduction Planner means an individual who has a valid certification issued by the Department pursuant to 310 CMR 50.54 or 50.55 to certify toxics use reduction plans for facilities owned or operated by his or her employer.

Lower hazard substance means a substance designated by the Council as a lower hazard substance pursuant to M.G.L. c.21I, § 9 and 301 CMR 41.00.

Manufacture means to produce, prepare, import or compound a toxic or hazardous substance. Manufacture shall also mean to produce a toxic or hazardous substance coincidentally during the manufacture, processing, use or disposal of another substance or mixture of substances, including a toxic substance that is separated from such other substance or mixture of substances as a byproduct, and a toxic substance that remains in such other substance or mixture of substances as an impurity.

Mixture means any combination of two or more chemicals, if the combination is not, in whole or in part, the result of a chemical reaction. However, if the combination was produced by a chemical reaction but could have been produced without a chemical reaction, it is also treated as a mixture. A mixture also includes any combination which consists of a chemical and associated impurities.

Multi-media means having to do with all environmental media including, but not limited to, water, land and air and workplaces within facilities.

NAICS means the North American Industry Classification System developed under the auspices of the United States Office of Management and Budget.

Natural asset or asset means the natural resource or toxic substance targeted in a resource conservation plan pursuant to 310 CMR 50.90.

Non-isolated intermediate means any intermediate which is not intentionally removed from the equipment in which it is manufactured, including any reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel or similar equipment, and any equipment through which the intermediate passes during a continuous flow process, but not including tanks or other vessels or equipment in which the substance or product is stored after manufacture.

Office means the Office of Technical Assistance and Technology within the Executive Office of Energy and Environmental Affairs.

Operation means a process or activity including, but not limited to, production processes, administrative activities, maintenance activities, food service, and other facility-based activities performed at a facility.

Otherwise use or other use means any use of a toxic substance that is not covered by the terms "manufacture" or "process" and includes use of a toxic substance contained in a mixture or trade name product. Relabeling or redistributing a container of a toxic substance where no repackaging of the toxic substance occurs does not constitute use or processing of the toxic substance.

Person means any individual, trust, firm, joint stock company, corporation, partnership, or association engaged in business or in providing service, excluding the Commonwealth of Massachusetts, and any authority, district, municipality or political subdivision of the Commonwealth of Massachusetts.

Plan summary or Summary means the plan summary that a toxics user is required to submit to the Department pursuant to M.G.L. c. 21I, § 11(F) and 310 CMR 50.40.

~~Plan update or Update means an updated toxics use reduction plan pursuant to M. G.L. c. 21I, § 11(D) and 310 CMR 50.40.~~

POTW, (publicly-owned treatment works) operators means holders of discharge permits for any devices and systems owned by the Commonwealth or any of its political subdivisions and used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature to implement 33 U.S.C. § 1281, or necessary to recycle or reuse water at the most economical cost under the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and the appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; any works, including the land that will be an integral part of the treatment process (including the land used for the storage of treated wastewater in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment; any other method or system for

preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste, including storm water runoff, or industrial waste, including waste in combined storm water and sanitary sewer systems.

Process means the preparation of a toxic or hazardous substance, including, without limitation, a toxic substance contained in a mixture or trade name product, after its manufacture, for distribution in commerce:

- (a) in the same form or physical state, or in a different form or physical state from, that in which it was received by the toxics user so preparing such substance; or
- (b) as part of an article containing the toxic or hazardous substance.

Product means a product, a family of products, an intermediate product, a family of intermediate products, or a desired result or a family of result. "Product" also means a byproduct that is used as a raw material without treatment. If a byproduct is treated before it is used as a raw material, then it is not a product.

Production unit means a process, line, method, activity, or technique, or a combination or series thereof, used to produce a product.

Resource Conservation means an action that decreases the use or consumption of a natural asset such as water, energy, or raw materials, or increases the efficiency of the use of the asset, without increasing the risk to the public, including workers and consumers, or the environment and without increasing the amount of waste generated.

Resource Conservation Plan means the plan a toxics user may develop as an alternative to a toxics use reduction plan pursuant to M.G.L. c. 21I § 11(D) and 310 CMR 50.90.

Senior management official means an official who has management responsibility for the person or persons completing the report or plan, and who has authority to act as an agent for the toxics user.

SIC code or standard industrial classification code means a specific identification code, within the identification code system developed by the United States Chamber of Commerce, assigned to a facility.

Small quantity toxics user means any toxics user who is not a large quantity toxics user.

Source reduction means any change in the design, manufacture, purchase, or use of materials, products, or energy to reduce their amount or toxicity before they become a waste (i.e., before recycling, treatment, release or disposal). Source reduction includes toxics use reduction.

State agency means any agency or authority of the Commonwealth as defined in M.G.L. c. 30A, § 1.

Thresholds amounts or threshold amount mean the following:

- (a) for those toxics users that manufacture or process a toxic or hazardous substance, as

the terms "manufacture" and "process" are defined herein, the threshold amount for a toxic or hazardous substance shall be 25,000 pounds each year at any one facility, except the threshold will be 1,000 pounds each year at any one facility for a higher hazard substance; and

(b) for those toxics users that otherwise use a toxic or hazardous substance, the threshold amount for a toxic or hazardous substance shall be 10,000 pounds each year at any one facility, except the threshold will be 1,000 pounds each year at any one facility for a higher hazard substance.

(c) if the administrator of the United States Environmental Protection Agency sets a threshold quantity for facility reporting on a toxic or hazardous substance under Section 313 of EPCRA which is lower than a corresponding threshold amount specified in paragraphs (a) or (b), then the corresponding threshold for that substance pursuant to M.G.L. c. 21I and 310 CMR 50.00 shall be the same as the federal threshold.

(d) if the Council sets a threshold amount in 301 CMR 41.00 for a higher hazard substance below that which is specified in paragraphs (a) and (b), that lower threshold shall apply for that higher hazard substance.

Toxics user means the following:

(a) a person who owns or operates any facility that manufactures, processes or otherwise uses any toxic or hazardous substance and that is classified in SIC Codes 10 through 14, inclusive, 20 through 40, inclusive, 44 through 51, inclusive, 72, 73, 75 and/or 76, or the corresponding NAICS codes.

(b) If a person owns a facility, and that person's only interest in the facility is ownership of the real estate upon which the facility is operated, then, with respect to that facility, that person is not a toxics user. This includes, without limitation, owners of facilities such as industrial parks, all or part of which are leased to persons who operate establishments within SIC codes 10 through 14, inclusive, 20 through 40, inclusive, 44 through 51, inclusive, 72, 73, 75 and/or 76, or the corresponding NAICS codes, where the owner has no other business interest in the operation of the facility or establishment.

Toxic means toxic or hazardous.

Toxic or hazardous substance means a substance in a gaseous, liquid, solid or other form which is identified on the toxic or hazardous substance list established pursuant to M.G.L. c. 21I, § 9 and 301 CMR 41.00, but which will not include any substance when it is:

(a) present in an article;

(b) used as a structural component of a facility;

(c) present in a product used for routine janitorial or facility grounds maintenance;

(d) present in foods, drugs, cosmetics or other personal items used by employees or other toxics users at a facility;

(e) present in a product used for the purpose of maintaining motor vehicles operated by a facility;

(f) present in process water or non-contact cooling water as drawn from the environment or from municipal sources, or present in air used either as compressed air or as part of combustion;

(g) present in a pesticide or herbicide when used in agricultural applications; or

(h) present in crude, lubricating or fuel oils or other petroleum materials being held for direct wholesale or retail sale; or

(i) present in crude or fuel oils used in combustion to produce electricity, steam or heat except when production of electricity, steam or heat is the primary business of a facility.

Toxic or hazardous substance list means the list of toxic or hazardous substances in 301 CMR 41.00 and established pursuant to M.G.L. c. 21I, § 9.

Toxics means toxic or hazardous substances.

Toxics use fee means the fee in 301 CMR 40.00 established under, and assessed pursuant to, M.G.L. c. 21I, § 19.

Toxics use reduction means in-plant changes in production processes or raw material that reduce, avoid, or eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of workers, consumers, or the environment, without shifting risks between workers, consumers, or parts of the environment. Toxics use reduction shall be achieved through any of the following techniques:

- (a) Input substitution, which refers to replacing a toxic or hazardous substance or raw material used in a production unit with a non-toxic or less toxic substance;
- (b) Product reformulation, which refers to substituting for an existing end-product an end product which is non-toxic or less toxic upon use, release or disposal;
- (c) Production unit redesign or modification, which refers to developing and using production units of a different design than those currently used;
- (d) Production unit modernization, which refers to upgrading or replacing existing production unit equipment and methods with other equipment and methods, based on the same production unit;
- (e) Improved operation and maintenance of production unit equipment and methods, which refers to modifying or adding to existing equipment or methods including, but not limited to, such techniques as improved housekeeping practices, system adjustments, product and process inspections, or production unit control equipment or methods; or
- (f) Recycling, reuse, or extended use of toxics by using equipment or methods which become an integral part of the production unit of concern, including but not limited to filtration and other closed loop methods.

However, toxics use reduction shall not include or in any way be inferred to promote or require incineration, transfer from one medium of release or discharge to other media, off-site or out-of-production unit waste recycling, or methods of and-of-pipe treatment of toxics as waste.

Toxics use reduction institute or Institute mean the Toxics Use Reduction Institute established pursuant to M.G.L. c. 21I, § 6.

Toxics use reduction plan or Plan means the plan [or update to the plan](#) that a toxics user is required to develop in accordance with M.G.L. c. 21I, § 11 and 310 CMR 50.40.

Toxics use reduction planner or planner means an individual certified by the Department in accordance with 310 CMR 50.50.

Toxics use report means the report that a toxics user is required to submit to the Department

pursuant to M.G.L. c. 21I, § 10 and 310 CMR 50.30.

Toxics use reduction planning program means an educational program in toxics use reduction developed by the Institute in accordance with M.G.L.c. 21I, § 6(E).

Trade secret means any formula, plan, pattern, process, production data, device, information, or compilation of information which is used in a toxics user's business, and which gives said toxics user an opportunity to obtain an advantage over competitors who do not know or use it.

Uniform certification examination, examination or exam means an examination prepared by the Department pursuant to M.G.L.c. 21I, s. 12.

Unit of product means a measure that reflects the level of production or activity associated with the use of the toxic or the generation of the toxic as byproduct.

User Segment means a set of no fewer than five toxics users who employ a similar production unit, classified by the department pursuant to 310 CMR 50.70. Production units grouped into a user segment must contain similar products and ~~poecesses~~processes.

50.21 Duty to Provide Information

- (1) A toxics user shall provide to the Department, within a reasonable time, any information the Department may request and that is deemed by the Department to be relevant in determining whether the toxics user is subject to the requirements of 310 CMR 50.00 or is in compliance with 310 CMR 50.00.
- (2) A toxics user shall allow personnel or authorized agents of the Department, upon presentation of credentials or other documents as may be required by law, to, without a warrant:
 - (a) Enter at all reasonable times any premises, public or private, for the purpose of investigating, sampling, or inspecting any records, condition, equipment, practice, or property relating to activities subject to M.G.L. c. 21I;
 - (b) Enter at any time such premises for the purpose of protecting the public health, safety, or welfare, or to prevent damage to the environment;
 - (c) Have access to and copy at all reasonable times all records that are required to be kept pursuant to the requirements of 310 CMR 50.00

50.40: Toxics Use Reduction Plans

310 CMR 50.40 through 50.49, cited collectively as 310 CMR 50.40, establishes requirements for developing toxics use reduction plans.

50.41: Applicability and Schedule

- (1) Large quantity toxics users shall prepare and complete a toxics use reduction plan for each facility by July 1 of each even-numbered calendar year ~~for in~~ which they are required to

file a toxics use report pursuant to 310 CMR 50.30, provided the even-numbered year is not the same year in which a toxics user first files a toxics use report, in accordance with the following schedule:

- ~~(a) For large quantity toxics users required to submit toxics use reports pursuant to 310 CMR 50.30 on July 1, 1993, plans shall be complete on or before July 1, 1994;~~
- ~~(b) For large quantity toxics users required to submit toxics use reports pursuant to 310 CMR 50.30 after July 1, 1993 that were not required to file toxics use reports on July 1, 1993, plans shall be complete by July 1 of the first subsequent year for which a report is due.~~

(2) Toxics users need not submit~~prepare~~ plans for facilities that have less than ten full-time employees unless:

- (a) the facility is within a priority user segment pursuant to M.G.L. c. 21I, § 14, and
- (b) the Department requires the toxics user to submit a report for the facility in accordance with M.G.L. c. 21I, §§ 11 and 14.

(3) Small quantity toxics users need not ~~submit reports~~prepare plans for facilities unless:

- (a) the facility is within a priority user segment pursuant to M.G.L. c. 21I, § 14, and
- (b) the Department requires the toxics user to submit a report for the facility in accordance with M.G.L. c. 21I, §§ 11 and 14.

(4) On or before the date that a plan must be complete pursuant to 310 CMR 50.41(1), toxics users shall submit to the Department a plan summary in accordance with 310 CMR 50.47.

(5) Toxics users shall complete plan updates every two years beginning with the date on which the initial plan is due pursuant to 310 CMR 50.41(1) by July 1 of the applicable year in accordance with 310 CMR 50.48.

(6) After a toxics user has completed one toxics use reduction plan and two plan updates, the toxics user may choose to implement an environmental management system pursuant to 310 CMR 50.80 or prepare a resource conservation plan pursuant to 310 CMR 50.90.

(7) A toxics user who has chosen to implement an environmental management system shall submit an EMS progress report to the Department by July 1 of the applicable year in lieu of a toxics use reduction plan summary in accordance with 310 CMR 50.83.

(8) A toxics user who has chosen to develop a resource conservation plan shall submit a resource conservation plan summary to the Department by July 1 of the applicable year in lieu of a toxics use reduction plan summary in accordance with 310 CMR 50.97. A toxics user may only substitute a resource conservation plan for a toxics use reduction plan every other planning year.

50.42: General Plan Requirements

(1) All plans, and plan summaries, and updates shall include each covered toxic required, pursuant to 310 CMR 50.30, to be included in the facility's toxics use report due on the same date that the plan summary is due.

(2) All plans, and plan summaries, and updates shall include each production unit required, pursuant to 310 CMR 50.30, to be included in the facility's toxics use report due on the same date that the plan summary is due.

(3) Each plan and each plan update shall include the following written statement signed by a certified toxics use reduction planner: "Based on my independent professional judgment as a toxics use reduction planner, I certify under penalty of law that the following is true:

- (a) I have examined and am familiar with this toxics use reduction plan;
- (b) the plan satisfies the requirements of 310 CMR 50.40; and
- (c) the plan demonstrates a good faith and reasonable effort to identify and evaluate toxics use reduction options."

Notwithstanding any professional designation held by a certified toxics use reduction planner or any trade organization of which that planner is a member by way of license, registration, certification, or similar qualification, the signed certification statement shall not mean that such planner signs in the capacity of anything other than a toxics use reduction planner.

(4) Each plan and each plan update shall include the following written statement signed by the senior management official of the facility: "I certify under penalty of law that the following is true:

- (a) I have personally examined and am familiar with this toxics use reduction plan;
- (b) I am satisfied that any supporting documentation used in the development of the plan exists and is consistent with the plan;
- (c) based on my inquiry of those individuals immediately responsible for the development of this plan, I believe that the information in the plan and any supporting documentation used in the development of the plan is true, accurate, and complete;
- (d) the plan, to the best of my knowledge and belief, meets the requirements of 310 CMR 50.40;
- (e) I am aware that there are penalties for submitting false information, including possible fines and imprisonment."

(5) Six months prior to the date when the plan or plan update must be complete, the toxics user shall notify all of its employees of the requirements of the plan or plan update, identify the toxics and production units for which a plan or a plan update will be submitted, provide the criteria for plans, and solicit in the notice comments or suggestions from all employees on toxics use reduction options. The plan shall include a description of the steps taken by the toxics user in order to comply with 310 CMR 50.42(5).

(6) In determining the amounts pursuant to 310 CMR 50.43(3), 50.44(2), 50.44(5), 50.44(6), 50.46(1)(b), and 50.46(4)(c), the plan shall:

- (a) refer to documents or other information used to determine these amounts, and

shall specify the location of such documents or information;

(b) include calculations of the amounts; and,

(c) state any assumptions made by the toxics user.

(7) Toxics users shall maintain plans for a facility on the premises of that facility, and shall make plans available ~~on the premises~~ to the Department upon request. Toxics users shall also make supporting documentation referred to in 310 CMR 50.42(6) available to the Department upon request. Toxics users shall maintain plans and supporting documentation for at least five years after the date that the plan summary is due.

(8) Toxics users shall develop information required by 310 CMR 50.40 in accordance with standard accounting practices;

(9) Toxics users shall develop information required by 310 CMR 50.40 in accordance with standard engineering practices;

(10) Toxics users shall develop information required by 310 CMR 50.40 in good faith.

(11) Toxics users shall demonstrate a good faith and reasonable effort to identify and evaluate toxics use reduction options.

50.43: Facility-wide Information Required in Each Plan

Toxics users shall develop and include in the plan the following facility-wide information:

(1) a statement of the management policy of the facility regarding toxics use reduction. This statement shall include, but not be limited to, a description of the ways in which the toxics user encourages toxics use reduction and a description of any policy applicable to the facility that encourages or discourages toxics use reduction. This statement may include, without limitation, the following information:

(a) a description of how toxics use reduction affects the facility's policy or decisions concerning research and development;

(b) a description of how toxics use reduction affects the facility's policy or decisions concerning financial investments or capital investments;

(c) a description of how toxics use reduction affects the facility's policy or decisions concerning hiring, promotions or bonuses, or other incentives, for facility employees;

(d) any other policy applicable to the facility that encourages or discourages toxics use reduction.

(2) a statement of the scope of the plan. This statement shall include but not be limited to the following:

(a) a description of each production unit included in the plan. The description of each production unit shall include the following information as reported in the facility's toxics use report due on the same date that the plan summary is due:

1. the number assigned to the production unit;

2. the process or processes associated with the production unit;

3. the product produced by the production unit; and,
 4. the chemical name and CAS number of each covered toxic manufactured, processed, or otherwise used in the production unit.
- (b) a summary of the identification process pursuant to 310 CMR 50.45(1);
 - (c) a brief description of the technologies, procedures, or training programs identified pursuant to 310 CMR 50.46(3), (4) and (5).

(3) the expected change in the use of each covered toxic and in the amount of each covered toxic generated as byproduct. The expected change shall be ~~determined in accordance with 310 CMR 50.43(4), shall be~~ based on toxics use reduction techniques chosen to be implemented as identified in the plan ~~or plan update~~, and shall be stated as:

- (a) the amount in pounds by which the toxics user plans to increase or decrease the use of the toxic; and,
- (b) the amount in pounds by which the toxics user plans to increase or decrease the amount of the toxic generated as byproduct.

~~(4) The expected increase or decrease determined pursuant to 310 CMR 50.43(3) shall be projected over two and five year periods. The two year project amounts shall be for the calendar year after the calendar year in which the plan is due and the five year projected amount shall be for the calendar year that is four years after the calendar year in which the plan is due.~~

50.44: Production Unit Information Required in Each Plan

For each production unit, toxics users shall determine or develop, and include in the plan, the following information:

- (1) a process flow diagram in accordance with the following:
 - (a) The process flow diagram shall be a visual representation of the movement of covered toxics through the process or processes within the production unit, including, but not limited to, covered toxics that flow into the process or processes and covered toxics that flow out of the process or processes as byproducts or products and covered toxics that are released to the environment as emissions or transferred off-site as emissions. The process flow diagram shall account for each manufacturing or process step in the production unit, and shall include waste treatment activities, and recycling activities that are not integral to the production unit, associated with the production unit. The process flow diagram may represent the movement of substances or other materials that are not covered toxics through the process or processes within the production unit.
 - (b) The number assigned to the production unit as reported in the facility's toxics use report due on the same date that the plan ~~summary~~ is due shall appear on the process flow diagram.
 - (c) The process flow diagram shall present the movement of each covered toxic through the production unit, including, but not limited to, each general location at which the covered toxic enters the production unit and each general location at which the covered toxic exits the production unit as a byproduct, emission, or product.

- (2) the following amounts, and a statement of the estimation methods used to determine these amounts:
 - (a) the total amount, and the amount per unit of product, of each covered toxic manufactured, processed, or otherwise used;
 - (b) the total amount, and the amount per unit of product, of each covered toxic generated as a byproduct;
 - (c) the total amount, and the amount per unit of product, of each covered toxic released or transferred off-site as an emission.
- (3) the unit of product associated with the production unit as reported in the toxics use report due on the date that the plan [summary](#) is due.
- (4) for each toxic, a statement explaining the purpose that the toxic serves in the production unit;
- (5) for each byproduct identified on the process flow diagram developed pursuant to 310 CMR 50.44(1), toxics users shall determine the amount of byproduct treated on-site, treated off-site, recycled on-site, recycled off-site, disposed of on-site, disposed of off-site, or released.
- (6) for each emission identified in the process flow diagram developed pursuant to 310 CMR 50.44(1), toxics users shall determine, for each environmental media, the amount of emissions released to the environment or transferred off-site, and the amount of emissions treated off-site treatment, recycled off-site, disposed of on-site or disposed of off-site.
- (7) the cost of the use of each covered toxic calculated in accordance with 310 CMR 50.46A.
- ~~(8) goals for the byproduct reduction index reported in the toxics use report due on the July 1 two years after the date on which the plan is due and a goal for the byproduct reduction index reported in the toxics use report due on the July 1 five years after the date on which the plan is due. Such goals shall be developed based on the toxics use reduction techniques chosen to be implemented as identified in the plan.~~

50.45: Procedures for Identifying Potential Toxic Use Reduction Techniques

- (1) Toxics users shall describe the procedure used by the toxics user to identify technologies, procedures, or training programs for potentially achieving toxics use reduction in each production unit. This procedure shall include, but not be limited to, a consideration of each type of toxics use reduction technique specified in the definition of "toxics use reduction" set forth in 310 CMR 50.10 and M.G.L. c. 21I, a list of personnel involved in the procedure, a description of information sources consulted, and a description of information gathering techniques.
- (2) Toxics users shall list technologies, procedures, and training programs identified as

potentially achieving toxics use reduction in each production unit pursuant to 310 CMR 50.45(1).

50.46: Technical Evaluation of Toxics Use Reduction Techniques

(1) Toxics users shall evaluate the technical feasibility of each technology, procedure, or training program listed in the plan pursuant to 310 CMR 50.45(1) and (2) in accordance with the following requirements:

- (a) Toxics users shall evaluate whether the technology, procedure, or training program constitutes toxics use reduction as defined in 310 CMR 50.10 and M.G.L. c. 21I, § 2.
- (b) Toxics users shall calculate the expected reductions resulting from implementation of the technology, procedure, or training program in accordance with 310 CMR 50.46(1)(b)1. through 4.:
 - 1. toxics users shall calculate expected reductions in the amount of toxics used in each production unit;
 - 2. toxics users shall calculate expected reductions in the amount of toxics used per unit of product for each production unit;
 - 3. toxics users shall calculate expected reductions in the amount of toxics generated by each production unit;
 - 4. toxics users shall calculate expected reductions in the amount of toxics generated as byproduct per unit of product for each production unit.
- (c) Toxics users shall evaluate the relationship between the technology, procedure, or training program being evaluated, and other applicable laws and regulations, including but not limited to, whether implementation of the technology, procedure, or training program will violate any other law or regulation.

(2) Toxics users need not complete the evaluation of a particular technology, procedure, or training program if, during the evaluation, the toxics user determines that the technology, procedure, or training program being evaluated is not appropriate for any of the following reasons:

- (a) the technique is clearly technically infeasible;
- (b) the technique is clearly economically infeasible, as determined pursuant to 310 CMR 50.46A;
- (c) implementation of the technology, procedure, or training program is not likely to result in a decrease in the amount of toxics used per unit of product or the amount of toxics generated as byproduct per unit of product.

(3) For technologies, procedures, or training programs that the toxics user decides not to implement, the plan shall include:

- (a) a description of the technology, procedure, or training program; and,
- (b) the reason for deciding not to implement the technology, procedure, or training program.

(4) For technologies, procedures, or training programs that the toxics user decides to implement, the plan shall include:

- (a) a description of the technology, procedure, or training to be implemented;

- (b) the anticipated costs and savings associated with the technology, procedure, or training program, as determined pursuant to 310 CMR 50.46A;
- (c) the expected reductions in the amount of toxics and the amount of toxics generated as byproduct resulting from implementation of the technology, procedure, or training program calculated pursuant to 310 CMR 50.46(1)(b). ~~The amounts determined pursuant to 310 CMR 50.46(1)(b) and stated in the plan pursuant to 310 CMR 50.46(4)(b) shall be projected for the calendar year after the calendar year in which the plan is due and for the calendar year that is four years after the calendar year in which the plan is due;~~
- (d) an implementation schedule.

- (5) If the evaluation required for a particular technology, procedure, or training program identified pursuant to 310 CMR 50.45(1) cannot be completed by the date that the plan is due, the plan shall include the following:
- (a) a description of the technology, procedure, or training program;
 - (b) a description of steps to be taken in order to further evaluate the technique and a schedule for taking these steps;
 - (c) an explanation as to why the evaluation cannot be complete by the date that the plan is due.

50.46A: Economic Evaluation of Potential Toxics Use Reduction Techniques

- (1) Toxics users shall evaluate the economic feasibility of each technology, procedure, or training program identified as technically feasible pursuant to 310 CMR 50.46 as compared to the current operations involving the toxic. In that analysis, the following items must be considered if they are relevant:
- (a) indirect and direct labor and materials costs (which shall be stated in the plan);
 - (b) purchase or manufacturing cost of the toxic and its alternative chemical;
 - (c) capital and equipment costs;
 - (d) storage, accumulation, treatment, disposal, and handling costs associated with toxics and byproducts;
 - (e) costs associated with activities required to comply with local, state, or federal laws or regulations, including but not limited to, fees, taxes, and costs associated with treatment, disposal, reporting and labeling;
 - (f) worker health or safety costs associated with the toxic and its alternative chemical, including but not limited to, protective equipment, and lost employee time due to accidents or routine exposure to the toxic;
 - (g) insurance;
 - (h) potential liability costs that may arise from intentional, unintentional, or accidental activities or occurrences; and
 - (i) loss of community goodwill and product sales lost to competing non-toxic products.
- (2) In determining costs and savings, toxics users shall consider items other than those set forth in 310 CMR 50.46A(1) if such other items are relevant and shall describe such items in the plan.

- (3) Toxics users shall determine the total cost per year and the cost per unit of product associated with the use of the toxic in the toxics user's current operations. Toxics users shall determine such costs for the calendar year preceding the date on which the plan is due. Toxics users shall include these total costs and the calculations in the plan.
- (4) Toxics users shall explain in the plan how costs associated with the use of the covered toxic were allocated to the production unit. The allocation of such costs to the production unit shall be accurate to the extent possible.
- (5) Toxics users shall state in the plan costs set forth in 310 CMR 50.46A(1) that are not relevant in determining the cost associated the covered toxic or cannot be reliably quantified. The toxics users shall explain in the plan why such costs are not relevant or cannot be quantified and shall state in the plan an estimated impact of the unquantified cost.
- (6) In evaluating the costs and savings associated with the technology, procedure, or training program identified as technically feasible pursuant to 310 CMR 50.46, toxics users shall state in the plan the discount rate, cost of capital, depreciation rate, or payback period, if any, used in each analysis. The discount method, depreciation rate, and payback period shall be consistent with the toxics user's current capital budgeting procedures. The decision concerning the economic feasibility of a technology, procedure, or training program shall be made at least consistent with the toxics user's current business decision making practices; provided, however, that a user may modify those practices to adopt a technology, procedure, or training program.
- (7) If no technologies, procedures, or training programs are identified pursuant to 310 CMR 50.45, or if these techniques are determined to be technically infeasible pursuant to 310 CMR 50.46, the toxics user shall identify, but is not required to quantify, the costs of using the toxic chemical in each production unit.

50.47: Plan Summary

- (1) Toxics users shall submit to the Department a plan summary on or before July 1 of the applicable year. Such summary shall include:
 - (a) a copy of the certification statement required pursuant to 310 CMR 50.42(3);
 - (b) the information required pursuant to 310 CMR 50.43(3) and,
 - (c) ~~for each production unit in which a toxic is manufactured, processed, or otherwise used, a matrix of the form required to be submitted in a toxics use report on a form prescribed by the Department. In completing the matrix, the toxics user shall mark the intersection of a production operation row and a technique column if the toxic user anticipates that during the next five years implementation of that technique for that operation is expected to account for an increase of five or more points in the byproduct reduction index for one or more covered toxic.~~ identify toxics use reduction techniques considered and techniques selected to be implemented.
- (2) Toxics users may include other information in the summary, including, but not limited to, the information required pursuant to 310 CMR 50.43(2).

- (3) The Department may require that the plan summary be submitted on a form prescribed by the Department.

50.48: Plan Updates

- (1) Toxics users shall complete plan updates every two years beginning with the date on which the initial plan is due pursuant to 310 CMR 50.41(1) by July 1 of the applicable year.
- (2) Plan updates shall include an explanation as to why the toxics user failed to implement a technology, procedure, or training program identified pursuant to 310 CMR 50.46(4) or failed to meet the schedule developed pursuant to 310 CMR 50.46(4)(d) or 310 CMR 50.46(5)(b).

50.49: Deficient Toxics Use Reduction Plans

- ~~(1)The Department may review plans, plan summaries, or plan updates, and any and all information or documentation supporting the information in the plan, summary, or update.~~
- ~~(2)If the Department determines that a deficiency in a plan, summary, or update was unintentional, then the Department shall allow the toxic user 90 days from the date of written notice of the deficiency to correct the deficiency. Failure to correct the deficiency within 90 days from the date of written notice of the deficiency shall be a violation of 310 CMR 50.00 for which the Department may take an enforcement action.~~
- ~~(3)A deficiency in a plan, summary, or update that the Department determines to an intentional deficiency shall be a deficiency for which the Department may take an enforcement action.~~
- ~~(4)The Department may determine that a plan, summary, or update is deficient for any of the following reasons:~~
- ~~(a)the plan, summary, or update, or any supporting documentation, was developed in bad faith;~~
 - ~~(b)the plan, summary, or update does not comply with any portion of 310 CMR 50.40;~~
 - ~~(c)—information required by or developed pursuant to 310 CMR 50.40 contains a material falsehood;~~
 - ~~(d)—the plan otherwise fails to satisfy the requirements of M.G.L. c. 21H, 310 CMR 50.40, or any other applicable law or regulation.~~

50.50: Toxics Use Reduction Planners

310 CMR 50.50 through 50.59~~63~~, cited collectively as 310 CMR 50.50, set forth the requirements for toxics use reduction planners.

50.55: Certification through Experience in Toxics Use Reduction Activities

- (1) The Department may certify an applicant as a limited practice toxics use reduction planner if he or she has at least two years of full-time work experience in toxics use reduction activities. Part-time work experience in toxics use reduction activities may be pro-rated in accordance with 310 CMR 50.52(2) and (4).
- (2) As used in 310 CMR 50.00, "toxics use reduction activities" include, but are not limited to, activities in which the individual uses the skills or knowledge necessary to conduct the analyses set forth in 310 CMR 50.51(2) or activities in which the individual uses the skills or knowledge necessary to evaluate whether the analyses set forth in 310 CMR 50.51(2) were conducted in accordance with 310 CMR 50.40. Successful completion of the toxics use reduction planner certification course shall also constitute a toxics use reduction activity, and shall count for six months of the two years of work experience required pursuant to 310 CMR 50.55(1).
- (3) In order to become certified under 310 CMR 50.55, an applicant shall demonstrate to the Department that he or she understands how the skills or knowledge referred to in 310 CMR 50.51(2) relate to toxics use reduction plans.
- (4) In determining whether an applicant satisfies 310 CMR 50.55(1) and (3), the Department may consider, without limitation, whether, through work experience, the applicant used or gained skills or knowledge that enable the applicant to conduct or evaluate the analyses set forth in [310 CMR 50.51\(2\)](#).
- (5) A planner certified pursuant to 310 CMR 50.55 may certify plans for any facility owned or operated by his or her employer, provided that he or she demonstrates to the Department that at least one year of his or her experience in toxics use reduction activities is related to the operations of the facility. In determining whether the planner's experience in toxics use reduction activities is related to the operations of the facility at which the planner seeks to certify a plan, the Department may consider, without limitation, the similarity of the production units, products, or processes at facilities where the planner received his or her experience in toxics use reduction activities to those at the facility at which the planner seeks to certify a plan.
- (6) As it is used in 310 CMR 50.50, "employer" means an individual or organization for whom the planner works and receives wages on a regular basis. For purposes of 310 CMR 50.50, a planner may not have more than one employer within the same time period. If a planner is an independent contractor and performs work for an individual or organization under a contract, for purposes of 310 CMR 50.50, the individual or organization is not the planner's employer.

50.56: Certification of [Toxics Use Reduction and Resource Conservation Plans](#)

- (1) A toxics use reduction planner shall certify a [toxics use reduction plan](#) or a [resource conservation plan](#) only if, in his or her independent professional judgment, the plan satisfies

the requirements of 310 CMR 50.40 or 310 CMR 50.90, as applicable, and demonstrates a good faith and reasonable effort to identify and evaluate toxics use reduction and/or resource conservation options.

(2) In certifying a plan, a toxics use reduction planner shall make a good faith and reasonable effort to identify and obtain relevant data or other information needed to comply with 310 CMR 50.56(1).

(3) In certifying a plan, a toxics use reduction planner shall maintain records of the procedures used to review the plan. The planner shall maintain such records for at least five years from the date that the planner certifies the plan.

50.58: Recertification Renewal

(1) A toxics use reduction planner may apply to the Department for recertification in accordance with 310 CMR 50.58. A toxics use reduction planner seeking recertification shall apply prior to the date on which his or her certification expires. Failure to do so shall result in the expiration of his or her certification, unless the Department extends the planner's certification pursuant to 310 CMR 50.58(4)(d). Timely submittal of an application for recertification shall extend the planner's certification until the Department issues a final decision denying recertification, or a final decision suspending or revoking the planner's certification pursuant to 310 CMR 50.50.

(2) In order to be recertified, a general practice toxics use reduction planner shall, during the time period of his or her first certification, complete at least 30 continuing education credits. For each subsequent recertification, such a planner shall complete 24 continuing education credits. In order to be recertified, a limited practice toxics use reduction planner shall, during the time period of his or her first certification, complete at least 24 continuing education credits. For each subsequent recertification, such a planner shall complete 20 continuing education credits. Recertification credits may include credits related to environmental management systems and resource conservation planning as defined in 310 CMR 50.62 and 50.63. The Department shall grant continuing education credits for completion of courses, seminars, or other educational or professional programs in the following areas:

(a) toxics use reduction activities as defined in 310 CMR 50.55(2); ~~or~~

(b) environmental management systems as specified in 310 CMR 50.80;

(c) resource conservation planning as specified in 310 CMR 50.90; or

(ed) other environmental laws or regulations, or laws of regulations pertaining to worker health or safety, except that such education may not count for more than four credits.

(3) Professional activities related to toxics use reduction, including but not limited to

presenting or publishing papers, teaching, participation in professional or trade associations, or participation in advisory committees for government agencies, may, at the Department's discretion, count toward up to eight credits of the coursework required in 310 CMR 50.58(2).

(4) The Department shall determine whether to recertify a planner in accordance with 310 CMR 50.58 and the following:

- (a) Courses, seminars, or any other educational or professional programs relating to toxics use reduction activities sponsored by the Department, the Office of Technical Assistance, the Toxics Use Reduction Institute, other state or federal pollution prevention agencies, or the Environmental Protection Agency shall be considered "approved by the Department" for the purposes of 310 CMR 50.58(2).
- (b) Individuals, sponsors or presenters of courses, seminars, or programs, or planners who wish to count courses, seminars, or any other educational or professional programs other than those set forth in 310 CMR 50.58(4) toward the recertification requirements of 310 CMR 50.58 may apply to the Department for approval of such courses, seminars, or other educational or professional programs. The Department may approve such courses, seminars, or other educational or professional programs at its discretion.
- (c) In general, one hour of coursework in topics specified in 310 CMR 50.58(2) shall equal one credit. In unusual cases, the Department may, at its discretion, specify that one hour of coursework in topics specified in 310 CMR 50.58(2) equals more than one credit, not to exceed two credits, if the Department determines that a particular course, seminar or other program, or a particular topic, is especially relevant or important to the responsibilities of toxics use reduction planners.
- (d) If the Department disapproves a course, seminar, or other educational or professional program, the Department may, at its discretion, extend a planner's certification so that the planner may attend other courses, seminars or programs.
- (e) Topics in pollution treatment or control shall not count toward the coursework required pursuant to 310 CMR 50.58(2)(a).
- (f) The Department may deny recertification for any of the reasons set forth in 310 CMR 50.59(1).

(5) Following review of an application for recertification, the Department shall issue a written decision granting or denying recertification. A decision denying certification shall state the grounds for such denial. A planner whose application for recertification is denied may request an adjudicatory hearing in accordance with M.G.L. c. 30A and 310 CMR 1.00, and 310 CMR 50.60.

(6) If the Department decides to deny recertification, the Department may, at its discretion, specify conditions that the applicant shall fulfill in order to be certified or recertified. Such conditions may include, without limitation, the following:

- (a) satisfactory completion of coursework pursuant to 310 CMR 50.58(2);
- (b) satisfactory completion of remedial education in accordance with 310 CMR 50.59(4);
- (c) a deadline for satisfying any conditions imposed by the Department pursuant to 310 CMR 50.58(6);

(d) a time period, not to exceed three years, during which the individual may not apply to the Department for certification as a toxics use reduction planner.

(7) A planner may apply to the Department for modification of the requirements set forth in 310 CMR 50.58. The Department may, at its discretion, modify the requirements of 310 CMR 50.58 for a planner. In determining whether to do so, the Department may consider, without limitation, whether satisfying the requirements set forth in 310 CMR 50.58 constitute undue hardship for the planner, or whether the nature of toxics use at the facility warrants modification of the requirements set forth in 310 CMR 50.58.

(8) The Department may establish a fee for recertification.

(9) The Department may establish a deadline for recertification.

(10) The Department may require applicants for recertification to apply on a form specified by the Department.

(11) The Department may suspend or revoke a toxics use reduction planner's certification for failure to meet the recertification requirements set forth in 310 CMR 50.58. The Department may preclude such individuals from reapplying for certification for up to three years. In determining whether to suspend or revoke a toxics use reduction planner's certification for failure to meet the recertification requirements set forth in 310 CMR 50.58, the Department may consider whether the failure was due to serious illness or other circumstances beyond the planner's control.

50.59: Procedure Governing Disciplinary Proceedings

(1) The Department may suspend, deny, or revoke a planner's certification, or deny recertification for any good cause, including, but not limited to:

- (a) gross negligence in complying with 310 CMR 50.50;
- (b) fraud or misrepresentation in complying with 310 CMR 50.50;
- (c) unethical conduct in complying with 310 CMR 50.50;
- (d) failure to meet the recertification requirements set forth in 310 CMR 50.58;
- (e) noncompliance with any provision of M.G.L. c.21I or 310 CMR 50.00.

(2) As part of an action taken by the Department pursuant to 310 CMR 50.59(1) to ~~deny~~, suspend or revoke certification, or ~~to deny~~ recertification, the Department may specify a time period, not to exceed three years, during which the planner may not apply to the Department for certification as a toxics use reduction planner.

(3) A planner may appeal a decision by the Department to suspend or revoke that planner's certification in accordance with M.G.L. c. 30A and 310 CMR 1.00, 310 CMR 4.00, and 310 CMR 50.60.

(4) Nothing in 310 CMR 50.59(1) shall constitute or be construed as limiting the Department's authority to take enforcement actions pursuant to other applicable laws and

regulations.

(5) The Department may request that the toxics use reduction planner who is potentially the subject of an enforcement action pursuant to 310 CMR 50.59(1) or (2) to attend an informal conference.

(6) Whenever the Department determines that a planner has violated any provision of 310 CMR 50.50, the Department may require that the toxics use reduction planner attend and successfully complete a course of remedial education proscribed by the Department. Failure to successfully complete such a course of remedial education may be grounds for the Department to suspend or revoke certification, or to deny recertification.

50.62: Requirements for Toxics Use Reduction Planners to Certify Environmental Management Systems

(1) In order for a general practice toxics use reduction planner to certify an environmental management system for any facility, the planner shall:

(a) complete an initial 16 continuing education credits in environmental management systems, including auditing such systems, as approved by the Department; or

(b) be accredited or certified under a national, international or other recognized EMS standard.

(2) In order for a limited practice toxics use reduction planner to certify an environmental management system for a facility owned by his or her employer, the planner shall:

(a) complete an initial 16 continuing education credits in environmental management systems, including auditing such systems, as approved by the Department; or

(b) have at least two years of experience in implementing environmental management systems, including auditing environmental management systems; or

(c) be accredited or certified under a national, international or other recognized EMS standard.

(3) Each planner shall submit documentation to the Department that he or she meets the requirements of 310 CMR 50.62(2) with the first EMS Progress Report that the planner certifies.

(4) Each planner who certifies an environmental management system shall, for a period of three years, maintain documentation of his or her efforts to obtain knowledge of current EMS practices and techniques that are generally accepted by the professional and trade communities implementing and auditing EMSs and shall provide such documentation upon request to the Department or to any facility for which the planner has certified or intends to certify an EMS.

50.63: Requirements for Toxics Use Reduction Planners to Certify Resource Conservation Plans

(1) Except as provided in 310 CMR 50.63(2), in order for a toxics use reduction planner to certify a resource conservation plan, the planner shall demonstrate to the Department that:

(a) The planner has completed 12 initial continuing education credits in resource conservation planning, including at least six credits in applying toxics use reduction planning methods to resource conservation planning, as approved by the Department; and

(b) Every four years thereafter, the planner has completed nine additional credits in resource conservation planning, including at least three credits each in energy conservation, water conservation, and solid waste reduction.

(2) A planner may certify a resource conservation plan that only focuses on toxics that are not “covered toxics” as defined in 310 CMR 50.10 without meeting the requirements of 310 CMR 50.63(1).

(3) For resource conservation plans developed by July 1, 2008, toxics use reduction planners shall submit documentation of resource conservation continuing education credits as specified in 310 CMR 50.63(1) with the resource conservation plan summary. The Department shall grant continuing education credits in resource conservation for any applicable course completed in the two years prior to July 1, 2008.

(4) For resource conservation plans developed by July 1, 2010 and thereafter, planners shall submit documentation of continuing education credits in resource conservation with their application for recertification submitted pursuant to 310 CMR 50.58.

50.80: Environmental Management Systems

310 CMR 50.80 through 50.84, cited collectively as 310 CMR 50.80, establish the requirements for implementing environmental management systems (EMSs) as an alternative to developing toxics use reduction plans.

50.81: Applicability and Schedule

(1) Large quantity toxics users and other toxics users may implement an environmental management system in lieu of a toxics use reduction plan once they have completed one toxics use reduction plan and two plan updates.

(2) An EMS shall be considered suitable if it was developed in conformance with the standards of ISO 14001, US EPA’s Performance Track Program, or other EMS standard adopted by a trade association or other standard-setting organization, provided that the EMS shall:

(a) contain the elements specified in 310 CMR 50.82;

(b) cover all the production units identified in the most recent toxics use report;

(c) consider toxics use reduction when identifying significant aspects and establishing associated objectives and targets;

(d) emphasize source reduction as the means of achieving objectives and targets; and

(e) have been in place for at least one full EMS cycle (i.e., plan-do-check-act) and have undergone an independent EMS audit.

(3) If the Department determines that an environmental management system developed pursuant to 310 CMR 80.00 has not proven to be effective as evidenced by noncompliance with any of the Department's regulations or permit conditions, the Department may, in addition to any enforcement action it takes with respect to such non-compliance with any of the Department's regulations or permit conditions, require that the toxics user take any or all of the following actions:

- (a) provide information to the Department about any apparent deficiencies in the environmental management system;
- (b) modify the environmental management system to prevent future deficiencies and non-compliance;
- (c) audit the environmental management system; and/or
- (d) prepare a toxics use reduction plan for all covered toxics and production units.

50.82: Requirements for an Environmental Management System

An environmental management system developed in lieu of a toxics use reduction plan shall contain the following elements:

- (1) A written environmental policy that expresses management and corporate support for, and makes a commitment to:
 - (a) compliance with environmental legal requirements;
 - (b) pollution prevention through source reduction and toxics use reduction; and
 - (c) continual improvement of the EMS and environmental performance.
- (2) A process for identifying significant environmental aspects and impacts from current and future activities at the facility. All covered toxics shall be identified as significant environmental aspects.
- (3) Identification of environmental legal requirements, including a system for tracking compliance and learning about and integrating changes to legal requirements into the EMS.
- (4) A process for establishing measurable objectives and targets that address significant environmental aspects and other EMS commitments and that emphasize preventing pollution at its source.
- (5) Environmental management programs designed to make progress toward achieving objectives, targets, and commitments in the EMS, including the means and time-frames for their completion.
- (6) Established roles and responsibilities of the facility's staff and management, on-site service providers, and contractors for meeting objectives and targets and complying with legal requirements, including a senior management representative with authority and responsibility for the EMS.
- (7) Environmental and compliance training, including specific training on toxics use

reduction for employees and contractors whose jobs and responsibilities involve activities directly related to significant aspects, achieving objectives and targets and compliance with legal requirements, and initiation training for new personnel.

(8) Procedures for communicating environmental and EMS information throughout the facility, including EMS awareness programs for all employees.

(9) Operational controls to ensure that equipment and other operations comply with legal requirements and address significant environmental aspects.

(10) Documentation of key EMS elements and procedures for document control and records management.

(11) Emergency preparedness and response procedures.

(12) Procedures for monitoring and measuring key operations and activities to assess environmental performance.

(13) Procedures for preventing and detecting non-conformance with legal and other requirements of the EMS, including an established compliance audit program and an EMS audit program, and procedures for corrective actions to ensure timely compliance and commitment to continual improvement. The EMS audit program shall require independent auditing on at least a two-year cycle and senior management review of audit results.

(14) Documented management review of performance against objectives and targets and the effectiveness of the EMS in meeting policy commitments.

50.83: EMS Progress Report

(1) A toxics user who has chosen to implement an EMS in lieu of a toxics use reduction plan shall submit to the Department an EMS progress report by July 1 of every even-numbered calendar year.

(2) The EMS progress report shall include a brief description of:

- (a) significant environmental aspects;
- (b) objectives and targets for the significant aspects.
- (c) measures being taken to incorporate source reduction into compliance and other activities; and
- (d) information on the progress made toward meeting objectives and targets, an explanation of why anticipated progress was not achieved, and, if applicable, the actions that have or will be taken to ensure that facility operations conform to the EMS.

(3) The Department may require that the EMS progress report be submitted on a form prescribed by the Department.

50.84: Certification of an EMS Progress Report

(1) Each EMS progress report shall include the certification statements set forth in 310 CMR 50.84.

(2) The certification statement shall be signed by a toxics use reduction planner who meets the requirements of 310 CMR 50.62 or an EMS professional who meets the following requirements:

(a) An EMS professional may certify an EMS progress report for any toxics user or other person if the professional has completed sixteen hours of toxics use reduction training, and has maintained documentation of such training.

(b) An EMS professional may certify an EMS progress report for a facility owned or operated by his or her employer if the professional has two years of documented experience in toxics use reduction.

(c) After meeting the requirements in 310 CMR 50.84(2)(a) and (b), all EMS professionals who continue to certify EMSs pursuant to 310 CMR 50.80 shall complete at least sixteen hours of toxics use reduction continuing education training every six years.

(d) An EMS professional shall submit documentation to the Department that he or she meets the requirements of 310 CMR 50.84 with the first EMS Progress Report that the EMS professional certifies.

(e) Any EMS professional who certifies an EMS progress report shall, for a period of three years, maintain documentation of having met the continuing education requirements in 310 CMR 50.84(2)(c) and shall provide such documentation, upon request, to the Department or to any facility for which the planner has certified or intends to certify an EMS.

(3) Each EMS progress report shall include the following written statement signed by either an EMS professional who meets the requirements of 310 CMR 50.84(2) or a toxics use reduction planner who meets the requirements of 310 CMR 50.62: “Based on my independent professional judgment, I certify under penalty of law that the following is true:

(a) I have examined and am familiar with this EMS;

(b) The EMS satisfies the requirements of 310 CMR 50.80; and

(c) The EMS demonstrates a good faith and reasonable effort to integrate toxics use reduction planning into the EMS.”

(4) The EMS progress report shall include the following written statement signed by a senior management official of the facility: “I certify under penalty of law that the following is true:

(a) I have examined and am familiar with this EMS;

(b) The EMS meets the requirements of 310 CMR 50.82 and the elements specified therein are being implemented;

(c) The EMS is actively addressing environmental compliance issues;

(d) The individual who has certified the EMS pursuant to 310 CMR 50.84(3) has provided me with documentation that he or she meets the requirements of 310 CMR 50.84(2).

(e) These statements are based upon answers to queries made by me to individuals who

have been designated to implement the EMS, and I have made my best effort to ensure that they are being held accountable for implementing the system in good faith. I understand that by choosing to implement an EMS in lieu of a toxics use reduction plan, I am responsible for maintaining documentation to evidence a good faith effort to implement all elements of the EMS.

(f) I am aware that there are penalties for submitting false information, including possible fines and imprisonment."

50.90: Resource Conservation Plans

310 CMR 50.90 through 310 CMR 50.99, cited collectively as 310 CMR 50.90, establishes requirements for developing a resource conservation plan as an alternative to developing a toxic use reduction plan.

50.91: Applicability and Schedule

(1) Large quantity toxics users and other toxics users may prepare a resource conservation plan in accordance with 310 CMR 50.90 in lieu of a toxics use reduction plan once the toxics user has completed one toxics use reduction plan and two plan updates.

(2) By July 1 of the applicable even-numbered calendar year, a toxics user that elects to prepare a resource conservation plan must complete a resource conservation plan and submit a resource conservation plan summary to the Department.

(3) Toxics users who choose to prepare a resource conservation plan pursuant to 310 CMR 50.90 shall:

(a) by July 1 of the following even-numbered calendar year, prepare a toxics use reduction plan pursuant to 310 CMR 50.40 and submit a toxics use reduction plan summary to the Department; and

(b) Include with the plan summary a progress report on the resource conservation plan on a form prescribed by the Department.

(4) After completing a resource conservation plan, toxics users may elect to prepare another resource conservation plan four years later, after meeting the requirements of 310 CMR 50.91(3).

50.92: General Resource Conservation Plan Requirements

(1) All toxics users that prepare a resource conservation plan shall select at least one natural asset listed in 310 CMR 50.92(2) as the focus of the plan.

(2) Natural assets shall include at least one of the following natural resources or toxics:

(a) Water use;

(b) Energy use;

(c) Toxic substances used below threshold amounts as defined in 310 CMR 50.10;

(d) Chemical substances that are not identified on the list of toxic or hazardous substances established pursuant to 301 CMR 41.00;

(e) Toxic substances present in articles;

(f) Other materials and products that contribute to solid waste.

- (3) Resource conservation plans may cover existing operations or products under development.
- (4) Each resource conservation plan shall include the following written statement signed by a certified toxics use reduction planner who meets the requirements of 310 CMR 50.63: "Based on my independent professional judgment as a toxics use reduction planner, I certify under penalty of law that the following is true:
- (a) I have examined and am familiar with this resource conservation plan;
 - (b) the resource conservation plan satisfies the requirements of 310 CMR 50.90; and
 - (c) the resource conservation plan demonstrates a good faith and reasonable effort to identify and evaluate resource conservation options."
- Notwithstanding any professional designation held by a certified toxics use reduction planner or any trade organization of which that planner is a member by way of license, registration, certification, or similar qualification, the signed certification statement shall not mean that such planner signs in the capacity of anything other than a toxics use reduction planner.
- (5) Each resource conservation plan shall include the following written statement signed by the senior management official of the facility: "I certify under penalty of law that the following is true:
- (a) I have personally examined and am familiar with this resource conservation plan;
 - (b) I am satisfied that any supporting documentation used in the development of the resource conservation plan exists and is consistent with the plan;
 - (c) based on my inquiry of those individuals immediately responsible for the development of this resource conservation plan, I believe that the information in the resource conservation plan and any supporting documentation used in the development of the resource conservation plan is true, accurate, and complete;
 - (d) the resource conservation plan, to the best of my knowledge and belief, meets the requirements of 310 CMR 50.90;
 - (e) I am aware that there are penalties for submitting false information, including possible fines and imprisonment."
- (6) At least six months prior to the date when the resource conservation plan must be complete, the toxics user shall notify all of its employees of the requirements of the resource conservation plan, identify the natural asset being considered as the focus of the resource conservation plan, and solicit in the notice comments or suggestions from all employees on resource conservation options for that asset. The resource conservation plan shall include a description of the steps taken by the toxics user in order to comply with this provision.
- (7) In determining the amounts pursuant to 310 CMR 50.93(3), 50.94(2), 50.96(1)(b), and 50.96(4)(c), the resource conservation plan shall:
- (a) refer to documents or other information used to determine these amounts, and shall specify the location of such documents or information;
 - (b) include calculations of the amounts; and,
 - (c) state any assumptions made by the toxics user.
- (8) Toxics users shall maintain resource conservation plans for a facility on the premises of that facility, and shall make resource conservation plans available to the Department upon request. Toxics users shall also make supporting documentation referred to in 310 CMR 50.92(5) available to the Department upon request. Toxics users shall maintain resource conservation plans and supporting documentation for at least five years after the date that the plan is due.

- (9) Toxics users shall develop information required by 310 CMR 50.90 in accordance with standard accounting practices;
- (10) Toxics users shall develop information required by 310 CMR 50.90 in accordance with standard engineering practices;
- (11) Toxics users shall develop information required by 310 CMR 50.90 in good faith.
- (12) Toxics users shall demonstrate a good faith and reasonable effort to identify and evaluate resource conservation options.

50.93: Facility-wide Information Required in Each Resource Conservation Plan

Toxics users shall develop and include in the resource conservation plan the following facility-wide information:

- (1) a statement of the management policy of the facility regarding resource conservation. This statement shall include, but not be limited to, a description of the ways in which the toxics user encourages resource conservation and a description of any policy applicable to the facility that encourages or discourages resource conservation. This statement shall include the following information, as applicable:
 - (a) a description of resource conservation in the facility's policy or decisions concerning research and development;
 - (b) a description of how resource conservation affects the facility's policy or decisions concerning financial investments or capital investments;
 - (c) a description of how resource conservation affects the facility's policy or decisions concerning hiring, promotions or bonuses, or other incentives, for facility employees; and
 - (d) any other policy applicable to the facility that encourages or discourages resource conservation.
- (2) a statement of the scope of the plan. This statement shall include, but not be limited to, the following:
 - (a) a description of the natural asset selected as the focus of the resource conservation plan;
 - (b) a description of all of the facility operations that use the selected asset;
 - (c) a summary of the identification process pursuant to 310 CMR 50.95(1); and
 - (d) a brief description of the technologies, procedures, or training programs identified pursuant to 310 CMR 50.96(3), (4) and (5).
- (3) a summary characterizing the facility's use of the selected natural asset, including all facility operations in which the asset is used.
- (4) a statement identifying and ranking opportunities for resource conservation regarding the selected natural asset.
- (5) a description of which operations were selected for more detailed evaluation pursuant to 310 CMR 50.94.
- (6) the expected change in the amount of use of the selected natural asset by July 1 of the next even-numbered calendar year pursuant to 310 CMR 50.94.

50.94: Detailed Information Required in Each Resource Conservation Plan

Toxics users shall determine or develop, and include in the resource conservation plan, the following information specific to the chosen natural asset and relevant operations:

- (1) a process flow diagram in accordance with the following:
 - (a) The process flow diagram shall be a visual representation of the movement of the asset through relevant operations, including, but not limited to, how assets flow into and out of operations and where assets are lost or become waste. The process flow diagram also may represent the movement of substances or other materials that are not assets through the operations;
- (2) the total amount of each asset used, which may be reported as an absolute amount or an amount per unit of product, and a statement of the estimation methods used to determine amounts;
- (3) the unit of product associated with relevant operations, if applicable;
- (4) for relevant operations, a statement explaining the purpose that the asset serves in the operations;
- (5) the cost of the use of each asset calculated in accordance with 310 CMR 50.96A; and
- (6) goals for reducing the use of the asset.

50.95: Procedures for Identifying Resource Conservation Techniques

- (1) Toxics users shall describe the procedure used by the toxics user to identify technologies, procedures, or training programs for achieving resource conservation for the selected asset. This procedure shall include, but not be limited to, a list of personnel involved in the procedure, a description of information sources consulted, and a description of information gathering techniques.
- (2) Toxics users shall list technologies, procedures, and training programs identified as potentially achieving resource conservation for the asset pursuant to 310 CMR 50.95(1).

50.96: Technical Evaluation of Resource Conservation Techniques

- (1) Toxics users shall evaluate the technical feasibility of each technology, procedure, or training program listed in the resource conservation plan pursuant to 310 CMR 50.95(2) in accordance with the following requirements:
 - (a) Toxics users shall evaluate whether the technology, procedure, or training program constitutes resource conservation as defined in 310 CMR 50.10.
 - (b) Toxics users shall calculate the expected reductions resulting from implementation of the technology, procedure, or training program in accordance with 310 CMR 50.96(1)(b)i and ii:
 - i. toxics users shall calculate expected reductions in the amount of the asset used in each operation;

- ii. toxics users shall evaluate the relationship between the technology, procedure, or training program being evaluated, and other applicable laws and regulations, including but not limited to, whether implementation of the technology, procedure, or training program will violate any other law or regulation.
- (2) Toxics users need not complete the evaluation of a particular technology, procedure, or training program if, during the evaluation, the toxics user determines that the technology, procedure, or training program being evaluated is not appropriate for any of the following reasons:
 - (a) the technique is clearly technically infeasible;
 - (b) the technique is clearly economically infeasible, as determined pursuant to 310 CMR 50.96 A;
 - (c) implementation of the technology, procedure, or training program is not likely to result in a decrease in the use of the natural asset or has adverse environmental impacts.
- (3) For technologies, procedures, or training programs that the toxics user decides not to implement, the plan shall include:
 - (a) a description of the technology, procedure, or training program; and,
 - (b) the reason for deciding not to implement the technology, procedure, or training program.
- (4) For technologies, procedures, or training programs that the toxics user decides to implement, the plan shall include:
 - (a) a description of the technology, procedure, or training to be implemented;
 - (b) the anticipated costs and savings associated with the technology, procedure, or training program, as determined pursuant to 310 CMR 50.46A;
 - (c) the expected reductions in the amount of the asset resulting from implementation of the technology, procedure, or training program calculated pursuant to 310 CMR 50.96(1)(b). The amounts determined pursuant to 310 CMR 50.96(1)(b) and stated in the plan pursuant to 310 CMR 50.96(4)(b) shall be projected for two years from the date the plan is due; and
 - (d) an implementation schedule.
- (5) If the evaluation required for a particular technology, procedure, or training program identified pursuant to 310 CMR 50.95(2) cannot be completed by the date that the plan is due, the plan shall include the following:
 - (a) a description of the technology, procedure, or training program;
 - (b) a description of steps to be taken in order to further evaluate the technique and a schedule for taking these steps; and
 - (c) an explanation as to why the evaluation cannot be complete by the date that the plan is due.

50.96A: Economic Evaluation of Potential Resource Conservation Techniques

- (1) Toxics users shall evaluate the economic feasibility of each technology, procedure, or training program listed in the resource conservation plan and calculate the:
 - (a) cost to implement each technology, procedure, or training program;
 - (b) all associated savings for each technology, procedure, or training program.

(2) If no technologies, procedures, or training programs are identified pursuant to 310 CMR 50.95, or if these techniques are determined to be technically infeasible pursuant to 310 CMR 50.96, the toxics user is not required to quantify the costs or savings of these techniques.

50.97: Resource Conservation Plan Summary

(1) Toxics users shall submit to the Department a resource conservation plan summary on or before July 1 of the applicable year. Such summary shall include:

- (a) a copy of the certification statements required pursuant to 310 CMR 50.92(4) and (5);
- (b) the information required pursuant to 310 CMR 50.93(6) and 310 CMR 50.94(6);
- (c) the natural asset identified in 310 CMR 50.93(2)(a);
- (d) the resource conservation techniques identified pursuant to 310 CMR 50.95(2);
- (e) the resource conservation techniques identified to be implemented pursuant to 310 CMR 50.96(4)(a);
- (f) the plan goals identified in 310 CMR 50.94(6);
- (g) the baseline amount of the asset used identified in 310 CMR 50.94(2);
- (h) the projected change in the amount of the asset used identified in 310 CMR 50.93(6)

(2) The Department may require that the summary be submitted on a form prescribed by the Department.

REGULATORY AUTHORITY

310 CMR 50.00: M.G.L. c. 21I, §§ 3, 10, 11 and 12.